

ARGUMENTS

By the foregoing amendment, claims 1, 2 and 13-17 have been amended and claims 3-12 and 18-34 have been cancelled without prejudice. No new matter has been added. A Request for Continuing Examination (RCE) is filed herewith. Reconsideration is respectfully requested.

The presently amended claims are fully enabled by and described in the originally filed specification. Both claims 1 and 2 are independent. The remaining claims have been converted to multiple dependent format so as to depend from either claim 1 or claim 2.

As amended, claim 1 recites A method for determining whether a human or animal subject is at risk of developing a neurodegenerative disorder characterized by the formation of beta amyloid deposits or, said method comprising the step of determining whether at least one mtDNA CR mutation selected from the group consisting of T414C mutations and T477C mutations is or are present in tissue, cells or body fluid obtained from the subject. As explained in the specification, Applicant has determined that T414C mutations and T477C are unique to Alzheimer's Disease patients. Thus, the presence of one or both of these specific mutations is, in itself, determinative of whether a subject is at risk for development of neurodegenerative disease. This method is neither taught nor suggested by the prior art.

As amended, independent claim 2 recites a method for determining whether a human or animal subject is at risk of developing a neurodegenerative disorder characterized by the formation of beta amyloid deposits or, said method comprising the step of determining whether the quantity of at least one mtDNA CR mutation selected from the group consisting of T146C, T152C, A189G and T195C is or are greater in tissue, cells or body fluid obtained from the subject than in the same type of tissue, cells or body fluid obtained from control subjects who do not suffer from neurodegenerative disease. As explained in the specification, Applicant has determined that T146C, T152C, A189G and T195C mutations are more common in Alzheimer's Disease patients than in controls. Thus, if a test subject has a significantly higher quantity of these mutations than are present in normal control subjects, the test subject is deemed to be at risk for neurodegenerative disease. This method is neither taught nor suggested by the prior art.

Conclusion

For the foregoing reasons, the application is believed to be in condition for allowance and issuance of a notice of allowance is earnestly solicited. A three (3) month extension is hereby petitioned for under 35 U.S.C. 1.136 and the fee for such extension will be paid electronically concurrently with filing of this response. The Commissioner is hereby authorized to charge any underpayment, or to credit any overpayment, to Deposit Account No. 50-0878.

Date: March 21, 2012

Respectfully submitted,
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